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From Invader to Income

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From Invader to Income

With the looming energy crisis, there is a growing need for new forms of fuel. Currently corn and switch grass are the most used sources of biofuel (S.L. Young et. al 2011). Corn and switch grass are used as feed for livestock so their use as biofuels is not optimal. The legal definition for invasive species is any non-native species that causes or has to the potential to cause damage to the ecosystem, economy, and human or animal health (Dr. Thomas Powers 2012). One possible option for a more sustainable biofuel source would be invasive species. Invasive species would be a good source of biofuel because; they are abundant and open for use (S.L. Young et. al. 2011). Currently, billions of dollars are spent each year in efforts to eliminate invasive species. If invasive species could be wielded for a greater good then they would be less of an economic burden. If a profit were made from invasive species like kudzu then it would be better for the environment than fossil fuels and part of the money could be used for cleaning and curing invaded land (R.F. Sage et. al 2009).

Why don't we do this already? People have expressed concern in transporting and growing them for use. However, they can be packaged into pellets for shipping and would be grown in closed facilities (S.L. Young et. al. 2011). They are so widespread throughout the United States and the world that utilizing them would be positively taking advantage of resources. People are also concerned about the cost but, using invasive species for fuel would decrease our dependence on fossil fuels and not cause so much harm to the environment (R.F. Sage 2009). Fossil fuels cost immense amounts of money and invasive species control costs the U.S. 138 billion dollars each year (AAEA 2003). Some speculators may believe this is a bad idea because; growing invasive could result in unwanted spread. However, barriers, supervision, and protocol to find as well as eliminate the spread invasive species outside the barriers would be implemented prior to growth (D.R. Gordon et. al.).

This issue is about more than just producing biofuels; it is about using invasive species to produce biofuels. We already know that biofuels are better for the environment than fossil fuels. Industries still want to produce fossil fuels because they are cheap, have greater energy output per capita, and require less land (Dr. Adam Liska 2012). However, the cost of cleaning the damage caused by fossil fuels is never taken into account. Biofuels are better for the environment

due to the fact that they do not produce a net increase for carbon into the atmosphere. Plants absorb carbon from the atmosphere so, any carbon released from biofuels made from plants was already there (Dr. Adam Liska 2012). When producing biofuels all of the billions of dollars spent on cleaning environmental damage can be used elsewhere. Not to mention so many new jobs would be created with this growing industry. Invasive species are unfortunately a part of our environment. We should utilize them because; if we don't invasive species will only be taking up space and adding nothing to the economy or the environment. In fact invasive species will only suck up money when we try to eradicate them or damage the environment when they grow in unwanted areas. If invasive species are used for biofuels then none of that money will have to be spent to clean up damage by invasive species. Those species would be utilized and valued instead.

So, invasive species and the oil crisis are both large problems that we face for both economic and environmental reasons. We have to amend current regulations in order to allow cultivation of certain invasive species like kudzu (R.F. Sage et. al 2009). We then need to invest more time and effort into research and development of equipment for making biofuels from invasive species. Using invasive species as a source of energy will pay off monetarily and is more sustainable than fossil fuels like oil which emit carbon dioxide and are not a stable investment for the future. Biofuels are a stable investment for the future and we need to use invasive species to produce them for the greater good.

References:

“Kudzu [Pueraria Mortana (Lour.) Merr. Variety labata]: A new source of carbohydrate for bioethanol production” Rowan F Sage et al. *Biomass & Bioenergy* V. 33 pgs. 57-61 2009

“Assessing the invasive potential of biofuel species proposed for Florida and the United States using the Australian Weed Risk Assessment” D.R. Gordon et. al. *Biomass & Bioenergy* V. 35 pgs. 74-79 2011

“Invasive plant species as potential bioenergy producers and carbon contributors” Stephen L. Young *Journal of Soil & Water Conservation* March/April 2011 Vol. 66 No. 2

Dr. Thomas Powers , UNL Biological Invaders professor 2012

Dr. Adam Liska, UNL Energy Science in Perspective professor 2012

“Economic Dimensions of Invasive Species” Edward A. Evans *Choices, A publication of the American Agricultural Economics Association. Second Quarter 2003*